

## Title (en)

METAL OXIDE-SUPPORTED EARTH-ABUNDANT METAL CATALYSTS FOR HIGHLY EFFICIENT ORGANIC TRANSFORMATIONS

## Title (de)

METALLOXIDGETRÄGERTE ERDREICHE METALLKATALYSATOREN FÜR HOCHEFFIZIENTE ORGANISCHE UMWANDLUNGEN

## Title (fr)

CATALYSEURS MÉTALLIQUES SUPPORTÉS PAR UN OXYDE MÉTALLIQUE ET ABONDANTS DANS LA TERRE POUR DES TRANSFORMATIONS ORGANIQUES HAUTEMENT EFFICACES

## Publication

**EP 3474987 A4 20200108 (EN)**

## Application

**EP 17842185 A 20170818**

## Priority

- US 201662376671 P 20160818
- US 201762470920 P 20170314
- US 2017047531 W 20170818

## Abstract (en)

[origin: WO2018035421A1] Surface hydroxyl groups on porous and nonporous metal oxides, such as silica gel and alumina, were metalated with catalyst precursors, such as complexes of earth abundant metals (e.g., Fe, Co, Cr, Ni, Cu, Mn and Mg). The metalated metal oxide catalysts provide a versatile family of recyclable and reusable single-site solid catalysts for catalyzing a variety of organic transformations. The catalysts can also be integrated into a flow reactor or a supercritical fluid reactor.

## IPC 8 full level

**B01J 21/10** (2006.01); **B01J 23/34** (2006.01)

## CPC (source: EP KR US)

**B01J 21/08** (2013.01 - EP KR); **B01J 23/74** (2013.01 - EP); **B01J 23/75** (2013.01 - KR); **B01J 27/128** (2013.01 - US); **B01J 29/0308** (2013.01 - EP); **B01J 31/121** (2013.01 - US); **B01J 31/1625** (2013.01 - EP); **B01J 31/2226** (2013.01 - EP); **B01J 35/64** (2024.01 - EP); **B01J 37/04** (2013.01 - US); **C07C 5/03** (2013.01 - EP KR); **C07C 5/10** (2013.01 - EP); **C07C 15/16** (2013.01 - KR); **C07C 29/141** (2013.01 - EP); **C07C 29/175** (2013.01 - EP); **C07C 45/62** (2013.01 - EP); **C07C 67/303** (2013.01 - EP); **C07C 209/36** (2013.01 - EP); **C07C 209/42** (2013.01 - EP); **C07C 209/72** (2013.01 - EP); **C07D 209/08** (2013.01 - EP); **C07D 213/127** (2013.01 - EP); **C07D 215/06** (2013.01 - EP); **C07D 243/28** (2013.01 - EP); **C07D 267/14** (2013.01 - EP); **C07D 307/44** (2013.01 - EP); **C07D 307/88** (2013.01 - EP); **C07D 327/00** (2013.01 - EP); **C07F 7/025** (2013.01 - EP); **B01J 23/745** (2013.01 - EP); **B01J 23/75** (2013.01 - EP); **B01J 23/755** (2013.01 - EP); **B01J 29/0333** (2013.01 - EP); **B01J 31/121** (2013.01 - EP); **B01J 2229/38** (2013.01 - EP); **B01J 2231/44** (2013.01 - US); **B01J 2231/46** (2013.01 - EP); **B01J 2231/641** (2013.01 - EP); **B01J 2231/643** (2013.01 - EP US); **B01J 2231/645** (2013.01 - EP US); **B01J 2231/646** (2013.01 - EP US); **B01J 2531/842** (2013.01 - EP); **B01J 2531/845** (2013.01 - EP US); **B01J 2531/847** (2013.01 - EP US); **C07C 2521/08** (2013.01 - EP); **C07C 2523/75** (2013.01 - EP KR); **C07C 2523/755** (2013.01 - EP); **C07C 2601/14** (2017.04 - EP); **Y02P 20/54** (2015.11 - EP)

## Citation (search report)

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- See references of WO 2018035421A1

## Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

## Designated extension state (EPC)

BA ME

## DOCDB simple family (publication)

**WO 2018035421 A1 20180222**; CN 109562355 A 20190402; EP 3474987 A1 20190501; EP 3474987 A4 20200108; JP 2019531873 A 20191107; KR 20190040257 A 20190417; US 11673125 B2 20230613; US 2020324276 A1 20201015

## DOCDB simple family (application)

**US 2017047531 W 20170818**; CN 201780049676 A 20170818; EP 17842185 A 20170818; JP 2019506613 A 20170818; KR 20197007553 A 20170818; US 201716314326 A 20170818